

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled)

Claim 11 (Currently Amended): A micro heat-transport device comprising:
a refrigerant;

an evaporator formed between a first glass and a first substrate;

a condenser formed between a second glass and a second substrate;

wherein the first and second substrates are at least one of a glass substrate and a silicon substrate;

a liquid passage linking the evaporator and condenser configured to allow the refrigerant to flow from the condenser to the evaporator;

a gas passage linking the evaporator and condenser configured to allow the refrigerant to flow from the evaporator to the condenser; and

a wick being included in one of the evaporator, the condenser, the liquid passage, or the gas passage, wherein the at least one of first and second glass and/or the at least one of first and second substrate [[is]] are covered with a stable material selected from the group consisting of SiO₂, SiN, SiC and a combination thereof formed by at least one of nitriding, oxidation, chemical vapor deposition, ion implantation, and carbonization.

Claim 12 (Currently Amended): A heat-transport device according to Claim 11,
wherein the ~~substrate is~~ first and second substrates are Si.

Claim 13 (Canceled):

Claim 14 (Previously Presented): A heat-transport device according to Claim 11, wherein the refrigerant is a material including hydrogen.

Claim 15 (Previously Presented): A heat-transport device according to Claim 11, wherein the wick is covered with the stable material.

Claim 16 (Currently Amended): A heat-transport device according to Claim 11, wherein the ~~glass and the substrate is~~ the first glass and the first substrate and/or the second glass and the second substrate are bonded to one another by anodic bonding.

Claim 17 (Currently Amended): A method for manufacturing a micro heat-transport device, the method comprising:

forming an evaporator between a first glass and a first substrate;

forming a condenser between a second glass and a second substrate;

forming a liquid passage and a gas passage between the evaporator and condenser;

forming a wick being in one of the evaporator, the condenser, the liquid passage, or the gas passage; and

coating the first and second glass and/or the first and second substrate with a stable material selected from the group consisting of SiO₂, SiN, SiC and a combination thereof by at least one of nitriding, oxidation, chemical vapor deposition, ion implantation, and carbonization.

Claim 18 (Currently Amended): The method of Claim 17, wherein the ~~substrate is~~ first and second substrates are Si.

Claim 19 (Canceled).

Claim 20 (Previously Presented): The method of Claim 17, wherein the refrigerant is a material including hydrogen atom.

Claim 21 (Previously Presented): The method of Claim 17, wherein the wick is covered with the stable material.

Claim 22 (Currently Amended): A method of Claim 17, wherein the ~~glass and the substrate~~ the first glass and the first substrate and/or the second glass and the second substrate are bonded to one another by anodic bonding.

Claims 23-24 (Canceled).

Claim 25 (Previously Presented): The heat-transport device according to Claim 11, wherein the wick is ion implanted.

Claim 26 (Previously Presented): The method of Claim 17, further comprising: coating the wick by ion implantation.

Claim 27 (Previously Presented): The heat-transport device according to Claim 11, wherein the wick is in the form of at least one of grooves, a screen and a sintered metal.

Claim 28 (Previously Presented): The method of Claim 17, wherein the wick is in the form of at least one of grooves, a screen and a sintered metal.

Claim 29 (Previously Presented): The heat-transport device according to Claim 11, wherein the refrigerant is at least one selected from the group consisting of water, ethyl alcohol, methyl alcohol, propyl alcohol, ethyl ether, ethylene glycol, Fluorinert and ammonia.

Claim 30 (Previously Presented): The method of Claim 17, wherein the coating comprises dry etching to form grooves or asperities; then

surface treating by at least one of ion implantation, thermal oxidation and steam oxidation; then

polishing by dry etching or plasma treatment; then

polishing by dry etching including covering with a mask an ion implantation; then

forming a thin film by vapor deposition; then

anodic bonding.

Claim 31 (Previously Presented): The heat-transport device of Claim 11, wherein the stable material is in contact with at least one of the glass and the substrate.

Claim 32 (Previously Presented): The heat-transport device of Claim 11, wherein the stable material is between the glass and the refrigerant.

Claim 33 (Canceled).

Claim 34 (Previously Presented): The method of Claim 17, wherein the coating coats the stable material directly on at least one of the glass and the substrate.

Claim 35 (Canceled).

Claim 36 (Previously Presented) The heat-transport device according to Claim 11, wherein the stable material is formed by chemical vapor deposition.

Claim 37 (Previously Presented) The method according to Claim 17, wherein the coating is chemical vapor deposition.

Claim 38 (Previously Presented) The heat-transport device according to Claim 11, wherein the stable material blocks the migration of an alkaline component from the glass and/or substrate into the refrigerant.

Claim 39 (Previously Presented) The method according to Claim 17, wherein coating the glass and/or the substrate blocks the migration of an alkaline component into the refrigerant.

Claim 40 (Previously Presented) The heat-transport device according to Claim 11, wherein the stable material blocks gas generation from the refrigerant.

Claim 41 (Previously Presented) The method according to Claim 17, wherein coating the glass and/or the substrate forms a stable material that blocks gas generation from the refrigerant.

Claim 42 (Withdrawn): The heat-transport device according to Claim 11, wherein the stable material is SiN.

Claim 43 (Withdrawn): The heat-transport device according to Claim 11, wherein the stable material is SiC.

Claim 44 (Previously Presented): The heat-transport device according to Claim 11, wherein the stable material is SiO₂.

Claim 45 (Withdrawn): The method of Claim 17, wherein the stable material is SiN.

Claim 46 (Withdrawn): The method of Claim 17, wherein the stable material is SiC.

Claim 47 (Previously Presented): The method of Claim 17, wherein the stable material is SiO₂.

Claim 48 (New): The micro heat-transport device according to Claim 11, which has a capillary pumped loop structure.

Claim 49 (New): The micro heat-transport device according to Claim 11, wherein the condenser is formed in the substrate and has a depth of about 200 μm .

Claim 50 (New): The method of Claim 17, wherein the condenser is formed in the second substrate and has a depth of about 200 μm .

Claim 51 (New): The micro heat-transport device according to Claim 1, wherein the wick comprises grooves having a width of about 30 μm and a depth of about 100 μm .

Claim 52 (New): The method of Claim 17, wherein forming the wick includes forming grooves each having a width of about 30 μm and a depth of about 100 μm .

Claim 53 (New): The micro heat-transport device according to Claim 11, wherein the stable material is present in the form of a layer consisting of SiO_2 .

Claim 54 (New): The method of Claim 17, wherein the coating forms a layer consisting of SiO_2 .